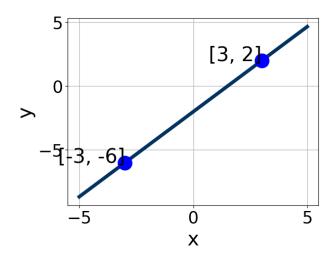
1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-4x-7}{7} - \frac{3x-5}{4} = \frac{-9x+8}{5}$$

- A. $x \in [2.82, 5.82]$
- B. $x \in [19.9, 22.9]$
- C. $x \in [-0.32, 2.68]$
- D. $x \in [7.04, 13.04]$
- E. There are no real solutions.
- 2. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-3.2, -0.6], B \in [-0.47, 2.53], \text{ and } C \in [-2.6, -1.5]$
- B. $A \in [3.6, 4.2], B \in [-4.11, -1.78], \text{ and } C \in [5.4, 7.9]$
- C. $A \in [-3.2, -0.6], B \in [-1.64, 0.98], \text{ and } C \in [1.9, 4]$
- D. $A \in [-4.8, -3], B \in [2.28, 3.26], \text{ and } C \in [-9.4, -4.7]$
- E. $A \in [3.6, 4.2], B \in [2.28, 3.26], \text{ and } C \in [-9.4, -4.7]$
- 3. Find the equation of the line described below. Write the linear equation

in the form y = mx + b and choose the intervals that contain m and b.

Perpendicular to 6x - 7y = 6 and passing through the point (7, -2).

A.
$$m \in [-0.91, -0.66]$$
 $b \in [2, 6.5]$

B.
$$m \in [-1.52, -1.16]$$
 $b \in [2, 6.5]$

C.
$$m \in [-1.52, -1.16]$$
 $b \in [-9.4, -7.3]$

D.
$$m \in [1.14, 1.33]$$
 $b \in [-10.2, -9.8]$

E.
$$m \in [-1.52, -1.16]$$
 $b \in [-7.6, -5.5]$

4. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-8x+10) = -6(-13x+17)$$

A.
$$x \in [20.5, 21.5]$$

B.
$$x \in [0.2, 1]$$

C.
$$x \in [-22.5, -20.4]$$

D.
$$x \in [1.1, 2.2]$$

E. There are no real solutions.

5. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 7x - 6y = 12 and passing through the point (2, -9).

A.
$$m \in [0.76, 1.05]$$
 $b \in [-11.78, -11.17]$

B.
$$m \in [1.13, 1.3]$$
 $b \in [11.14, 11.58]$

C.
$$m \in [-1.45, -1.1]$$
 $b \in [-7.04, -6.43]$

D.
$$m \in [1.13, 1.3]$$
 $b \in [-11.01, -10.53]$

E.
$$m \in [1.13, 1.3]$$
 $b \in [-11.78, -11.17]$

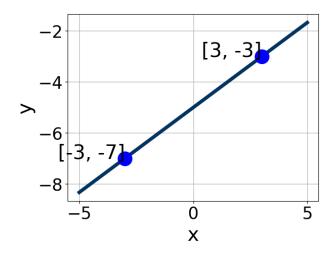
6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x-8}{5} - \frac{5x+4}{7} = \frac{4x-7}{8}$$

- A. $x \in [-1.08, 0.3]$
- B. $x \in [0.51, 0.88]$
- C. $x \in [26.71, 27.58]$
- D. $x \in [6.5, 7.26]$
- E. There are no real solutions.
- 7. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-9, -8)$$
 and $(-10, 3)$

- A. $m \in [-13, -7]$ $b \in [107, 110]$
- B. $m \in [5, 13]$ $b \in [110, 116]$
- C. $m \in [-13, -7]$ $b \in [13, 19]$
- D. $m \in [-13, -7]$ $b \in [-113, -106]$
- E. $m \in [-13, -7]$ $b \in [0, 4]$
- 8. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-0.9, -0.3], B \in [-1.86, -0.87], \text{ and } C \in [3, 12]$
- B. $A \in [-0.9, -0.3], B \in [0.8, 2.46], \text{ and } C \in [-11, -4]$
- C. $A \in [0.5, 2.3], B \in [1.88, 3.18], \text{ and } C \in [-20, -12]$
- D. $A \in [-5.1, -1.8], B \in [1.88, 3.18], \text{ and } C \in [-20, -12]$
- E. $A \in [0.5, 2.3], B \in [-3.74, -2.96], \text{ and } C \in [12, 16]$
- 9. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(-7, -10)$$
 and $(4, -5)$

A.
$$m \in [-1.05, -0.36]$$
 $b \in [-3.31, -3.02]$

B.
$$m \in [0.14, 0.87]$$
 $b \in [6.13, 6.98]$

C.
$$m \in [0.14, 0.87]$$
 $b \in [-9.15, -8.92]$

D.
$$m \in [0.14, 0.87]$$
 $b \in [-6.97, -6.66]$

E.
$$m \in [0.14, 0.87]$$
 $b \in [-3.08, -2.79]$

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(-4x - 5) = -16(-12x + 19)$$

- A. $x \in [-2.58, -1.04]$
- B. $x \in [0.12, 1.3]$
- C. $x \in [0.92, 2.31]$
- D. $x \in [2.37, 3.57]$
- E. There are no real solutions.

5170-5105 Summer C 2021